The Use of Packed Red Cells In Transfusions

Heretofore whole blood has been considered the primary agent for the treatment of a variety of anemias. With the increasing successful fractionation of whole blood, physicians are obligated to choose blood components with more specificity.

When a blood transfusion is contemplated, packed red blood cells rather than whole blood should be given primary consideration. The transfusion of whole blood should require evidence of its need—that is, hypovolemic shock.

The pathophysiology of impending cardiac decompensation, hepatic cirrhosis, uremia, acute burns, anemia associated with bone marrow failure, debilitated, aged or patients of small size may be complicated by whole blood transfusions. In most cases, preoperative anemia and surgical blood loss can best be treated with packed red blood cells or balanced salt solution or both.

Red blood cells are the only blood component that can increase the oxygen-carrying capacity of the patient's circulation. Plasma proteins, platelets, electrolytes, leukocytes, coagulation factors and metabolic wastes are inescapable by-products given when *whole* blood transfusions are used to increase the oxygen-carrying capacity of blood.

Probably 75 to 80 percent of patients who require transfusions should receive packed red blood cells.

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